



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Adopt resolution authorizing the City Manager to provide a Public Benefits Program Grant in the amount of \$25,000 to fund the Demand-side Management Project for Holz Rubber

MEETING DATE: April 4, 2001

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: That the City Council adopt a resolution authorizing the City Manager to provide a Public Benefits Program Grant in the amount of \$25,000 to Holz Rubber Company as part of a demand-side management project.

BACKGROUND INFORMATION: In an effort to reduce annual energy costs, Holz Rubber Company, located at 1129 South Sacramento Street, has embarked upon a series of demand-side management projects. The first phase of their effort consists of insulating the entire steam pipe delivery and return system within the facility. Prior to insulating the delivery and return system, the piping will be checked for leaks (any and all leaks will be repaired/sealed before insulation is added). This element will save nearly \$40,000 a year in energy costs.

The second phase in the energy conservation plan is to test, and where needed, clean or replace all existing steam traps inside the facility. It is estimated that this will save in excess of \$7,000 annually. The third and final phase of the demand-side management plan is to install a curtain enclosure system around the facilities press and molding machines. The enclosure system reduces heat loss, and will have a projected energy savings of \$2,500 per year.

Future proposed demand-side management or energy conservation measures include: a facility-wide lighting retrofit, installing new skylights, and insulating the facilities autoclaves, caustic tanks and boiler(s).

Assisting the City of Lodi Electric Utility in the identification of the various energy conservation measures were Planergy International, the city's chosen energy services company, and the engineering and maintenance team at Holz Rubber Company. The aforementioned energy efficiency improvements are recommended, and do qualify as approved demand-side management components of the City of Lodi Public Benefits Program.

FUNDING: 164605 – Public Benefits Program (Category: Demand-side Management)

Funding Approval: *Vicky McAthie*
Vicky McAthie, Finance Director

Alan N. Vallow
Alan N. Vallow
Electric Utility Director

PREPARED BY: Rob Lechner, Manager of Customer Programs

ANV/RL/lt

APPROVED:

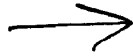
H. Dixon Flynn
H. Dixon Flynn - City Manager

April 4, 2001: Addendum to Consent Calendar Items E-21 and E-23

E-21, Public Benefits Program Grant- Quashnick Tools Company Demand-side Management Project (\$15,562)

The grant amount of \$15,562 to Quashnick Tools demand-side management project reflects a 10% contribution from the City of Lodi Public Benefits Program fund. To date, all other demand-side management rebates to commercial & industrial customers have been 25% of the total project cost.

Rationale: In reviewing the scope of work, and the particular equipment to be purchased, it was determined that a 10% Public Benefits Program grant was most appropriate. Quashnick Tools has approximately fourteen (14) milling machines, or similar pieces of equipment, that are utilized in like fashion to the BostoMatic 12 recently purchased (and is the eligible piece of equipment for an energy efficiency rebate). The BostoMatic 12, which is a high efficiency/energy efficient unit, will replace a 15 year old milling machine. However, Quashnick Tools total energy reduction- *as a result of replacing one inefficient/aging milling machine-* was assessed as nominal. It has been determined that the new BostoMatic 12 consumes 20% less electricity than the existing piece of equipment. After carefully assessing these various factors, it is recommended that a Public Benefits Program grant of *less* than the traditional 25% is most appropriate for this project (a 10% grant is the requested grant amount).



E-23, Public Benefits Program Grant- Holz Rubber Company Demand-side Management Project (\$25,000)

The grant amount of \$25,000 to Holz Rubber Company's demand-side management project reflects a 25% contribution from the City of Lodi Public Benefits Program fund. This 25% contribution figure was not listed on the original City Council Communication.

In March of this year, Holz Rubber Company approached the Electric Utility Department staff seeking assistance in reducing their overall energy costs. The City of Lodi Electric Utility enlisted the services of Planergy International (formerly Energy Masters International), the city's chosen energy services partner, to provide an immediate solution to Holz Rubber Company's request. Following a day-long visit and assessment of the Holz facility, Planergy International recommended the most advantageous (and simplest to implement) energy efficiency improvement: insulating the hundreds of feet of steam pipe within the plant. The estimated total project cost to Holz Rubber Company, as projected by the aforementioned assessment, is \$100,000.

Holz Rubber: Scope of Work

Steam System Improvements

Steam Pipe

- Insulation work will be performed during regular business hours
- Piping modifications must be performed on weekends when boiler is down
- Reuse existing 4" header to presses
- Install new branch lines and fittings to presses
- Install new valves in branch lines (approx. 60) to presses
- Replace flex pipe to presses as needed (approx. 100 of the approx. 300 hoses)
- Owner to provide in-house custom made flex pipe to presses; Planergy to install
- Replace existing 5" - 6" supply line valves (approx. 3)
- Insulate approx. 100' of 5" - 6" steam pipe and all fittings
- Insulate approx. 80' of 4" steam pipe and all fittings
- Insulate approx. 935' of 2" steam pipe and all fittings
- Insulate approx. 30' of 1-1/2" steam pipe and all fittings
- Removable insulation will be installed for areas of high maintenance, i.e. supply valves

Condensate Return Pipe

- Insulate approx. 100' of 6" condensate return pipe and all fittings
- Insulate approx. 100' of 4" condensate return pipe and all fittings
- Insulate approx. 100' of 2" condensate return pipe and all fittings

Steam Traps

- Test all existing traps for operation
- Replace steam traps as needed (approx. 35 of 70) with rugged inverted bucket traps
- Potentially all traps could need replacement
- Properly size all steam traps to be installed
- Install new steam traps as necessary where traps currently do not exist

Autoclaves

- Install insulation on six (6) autoclaves.

Caustic Tanks

- Install insu Four (4) tanks currently operate without covers
 - Note: It is strongly recommended that covers are fabricated for these tanks
 - Generally, these tanks are kept at 180 degrees exposed to atmosphere

Holz Rubber: Draft Project Summary

Steam System Improvements

Utilization Factor = 50%

	Energy Savings MMBtu/Yr	Total Savings (Therms)	Total Savings (\$)
Steam Piping Insulation	4,599	45,994	\$ 36,795
Condensate Return Piping Insulation	398	3,982	\$ 3,185
Autoclaves Insulation	172	1,672	\$ 1,338
Caustic Tank Insulation	589	5,721	\$ 4,576
"Jacuzzi" Covers	0	0	\$ -
Steam Leaks	948	9,203	\$ 7,362
Steam Traps	1,179	11,450	\$ 9,160
	2,127	78,021	\$ 62,417

Annual Consumption (Therms) = 360,000
 Projected Savings = 62,417 (Could be as high as \$100,000)
 Average Estimated Gas Cost = \$ 0.80 (Recent costs have been as high as \$2.29/therm)
 Percent Savings = 22%
 Installed Cost = 183,067 (Could be as low as \$133,000)
 Simple Payback = 2.9

RESOLUTION NO. 2001-80

A RESOLUTION OF THE LODI CITY COUNCIL AUTHORIZING
THE CITY MANAGER TO PROVIDE A PUBLIC BENEFITS
PROGRAM GRANT – DEMAND-SIDE MANAGEMENT PROJECT
TO HOLZ RUBBER COMPANY

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WHEREAS, the State has mandated that beginning January 1, 1998, the City of Lodi is obligated to fund various programs through a Public Benefits Charge (PBC) based on a historical electric revenue requirement; and

WHEREAS, the requirement amounts to approximately \$1 Million per year that must be dedicated to qualifying programs such as energy efficiency. A further stipulation is that these efforts must be done on the customer's side of the meter in order to qualify; and

WHEREAS, the Electric Utility Department recommends that the City provide a Public Benefits grant in the amount of \$25,000.00 to fund the following projects:

- 1) The first phase of their effort consists of insulating the entire steam pipe delivery and return system within the facility. Prior to insulating the delivery and return system, the piping will be checked for leaks (any and all leaks will be repaired/sealed before insulation is added). This element will save nearly \$40,000 a year in energy costs.
- 2) The second phase in the energy conservation plan is to test, and where needed, clean or replace all existing steam traps inside the facility. It is estimated that this will save in excess of \$7,000 annually.
- 3) The third and final phase of the demand-side management plan is to install a curtain enclosure system around the facilities press and molding machines. The enclosure system reduces heat loss, and will have projected energy savings of \$2,500 per year.

WHEREAS, assisting the City of Lodi Electric Utility in the identification of the various energy conservation measures were Planergy International, the City's chosen energy services company, and the engineering and maintenance team at Holz Rubber Company. The aforementioned energy efficiency improvements are recommended, and do qualify as approved demand-side management components of the City of Lodi Public Benefits Program.

NOW, THEREFORE, BE IT RESOLVED, that the Lodi City Council hereby authorizes the City Manager to provide a Public Benefits Program Grant in the amount of \$25,000.00 to Holz Rubber Company to fund a demand-side management project as set out above.

Dated: April 4, 2001

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I hereby certify that Resolution No. 2001-80 was passed and adopted by the Lodi City Council in a regular meeting held April 4, 2001 by the following vote:

AYES: COUNCIL MEMBERS – Hitchcock, Land and Mayor Nakanishi

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – Howard and Pennino

ABSTAIN: COUNCIL MEMBERS – None


SUSAN J. BLACKSTON
City Clerk